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XII.—*Extracts from a Journal of Travels in Palestine &c., in 1838; undertaken for the Illustration of Biblical Geography.*
By the Rev. E. ROBINSON and the Rev. E. SMITH. Drawn up by the Rev. EDWARD ROBINSON, D.D., Professor of Theology in New York.

I. FROM 'Aḳabah to Jerusalem, through the Western Desert.

It had been our intention to go directly from 'Aḳabah to Wādī Músa along the great valley El 'Arabah; but circumstances induced us to change our plan; and we determined to keep our good Towará guides, and take the road across the Great Western Desert in the direction of Gaza and Hebron,—a route as yet untrodden by modern travellers. Besides our five Towará Arabs under the direction of Tuwëileb, who had travelled with Rüppell, Laborde, and Lord Lindsay, we took two Arabs of the 'Amrán, a tribe living around 'Aḳabah and to the S.E. of that place, as the Towará were not acquainted with the route we proposed to follow. We left 'Aḳabah late in the afternoon of April 5th, 1838, and, recrossing the plain of Wādī 'Arabah, began to ascend the western mountains by the great Hajj route. We soon encamped for the night; and from this point we had seven long days' journey with camels to Hebron. The ascent soon becomes steep and difficult. The way is almost literally strewn with the bones of camels, and skirted with the graves of pilgrims; all testifying to the difficulty of the pass. On reaching the summit, we soon came out upon the great plateau of the Desert, probably from 1200 to 1500 feet above the sea, and found ourselves higher than the mountain-peaks which we had seen from below, and through which we had just ascended. Not far from the top of the pass, we left the Hajj route; and, turning off in a direction about N.N.W., we launched forth again into "the great and terrible wilderness."

For the first two days the general character of this desert was similar to that between Cairo and Suez,—a vast unbounded plain, a hard gravelly soil, irregular ridges of limestone hills in various directions, the mirage, and especially the Wádís or watercourses. Our Arabs gave to this part of the Desert the name Et-Tih, the Desert of Wandering. The Wádís are here frequent: at first they all ran N.W. into the main watercourse of this part of the Desert, Wādī Jeráfēh; which, having its head far to the south, runs in a N.E. course to join the valley El 'Arabah nearly opposite to Mount Hor. We crossed Wādī Jeráfēh about the middle of the second day, and were struck with the traces of the large volume of water which apparently flows through it in the winter season. On the morning of the third day we reached the watershed of the Desert; after which all the Wádís run in a westerly direction into the great watercourse which drains the more

western part of the Desert, and flows down to the sea near El 'Aräish.

Almost from the time we entered upon this vast plain, we had before us, as a landmark, a high conical mountain, apparently isolated, along the western base of which we were to pass. It bears the name 'Aráif en-Nákah; and a lower ridge extends from it eastward. For nearly three days this mountain of the Desert was before us. As we approached it on the third day, the country became undulating and uneven, and the hills more frequent. I estimated the height of Jebel 'Aráif above the plain at about 500 feet; it is composed wholly of limestone, covered with pebbles of flint, and has no traces of volcanic action. It forms the south-western corner or bulwark of the mountainous region which extends hence to the northward; and from it a ridge stretches east, terminating in a bluff called Makrah, near El 'Arabah and opposite Mount Hor, as we saw, on a subsequent journey, from the pass of Nemellah.

The general elevation of the great plateau continues nearly the same, except where traversed by the Wádís; and the gradual ascent to the water-shed is not perceptible, and can only be discovered by the course of the streams in the valleys.

To the S.S.W. of Jebel 'Aráif is a mountain called Ikhrim, lying between our route and Wádi 'Aräish, and farther to the north we saw the mountains Yelek and El-Helál. After passing Jebel 'Aráif, our course turned more towards the N.N.E., and the character of the Desert was changed. On our right was now a mountainous district, composed of irregular limestone ridges, running in various directions, and occupying the whole region quite to Wádi 'Arabah; as we had afterwards an opportunity of observing. This mountainous district is penetrated by none of the roads which lead from the vicinity of the Red Sea to Gaza or Jerusalem: but these roads all fall into the one we were travelling before reaching Jebel 'Aráif, or not far from that mountain. All these circumstances go to show that our route could be no other than the ancient Roman road from Ailah to Hebron and Jerusalem; which also, like the present road, could not well have been anything more than a caravan route for beasts of burden.

The road passes along the western side of this mountainous district, crossing many broad Wádís which flow down from it westward, with elevated ridges of table-land between them. We made frequent and minute inquiry after the names of places or stations which are known to have existed anciently upon this Roman road. Of the more southern ones, Rosa and Gypsaria, we could find no trace. Early on the fourth day we crossed a broad Wádi called El-Lisán, marking perhaps the site of ancient Lyssa; but we could discover no trace of ruins. In the forenoon

of the fifth day we diverged a little to the left, to visit ruins which had been described to us under the names Anjeh and 'Abdeh, and which are doubtless the remains of ancient Eboda. They consist of the walls of a large Greek church, and an extensive fortress, both situated upon a long hill or ridge overlooking a wide plain. Connected with the fortress are cisterns and deep wells walled up with uncommonly good masonry. On the south side of the hill and below are the ruins of houses, surrounded by traces of extensive ancient cultivation.

We were now crossing a more sandy portion of the Desert; and in the afternoon of the same day we had our first specimen of the simoom or southern wind of the Desert. It came over us with violence like the glow of an oven, filling the air with fine particles of dust and sand, so as to obscure the sun and render it difficult to see objects only a few rods distant. We encamped in Wádí Ruheibeh, where we had never heard of ruins; but, on ascending the hill on our left, we discovered the remains of a city not much less than 2 miles in circuit. The houses had been mostly built of hewn stone; there were several public buildings and many cisterns; but the whole is now thrown together in unutterable confusion, as if the city had been suddenly overthrown by some tremendous earthquake. What ancient city this can have been, I have not yet been able to learn. The Arabic name suggests the Rehoboth of Scripture, the name of one of Isaac's wells (Gen. xxvi. 22), but the other circumstances do not correspond.

We now approached a more fertile region. Towards noon of the sixth day we reached *Khulášah*, the site of ancient Elusa. It was a city of at least 2 miles in circuit. The foundations of buildings are everywhere to be traced; and several large unshapen piles of stones seem to mark the sites of public edifices. Fragments of columns are occasionally seen, but no cisterns. A public well, still in use, seems to have supplied the city.

After crossing another elevated plateau, the character of the surface was again changed. We came upon an open undulating country: all around were swelling hills, covered in ordinary seasons with grass and rich pasturage; but now arid and parched with drought. We now came to Wádí Seba'; and on the N. side of its watercourse we had the gratification of discovering (April 12th) the site of ancient Beersheba, the celebrated border-city of Palestine, still bearing in Arabic the name of *Bir Seba*'. Near the watercourse are two circular wells of fine water, more than 40 feet deep. They are surrounded with drinking-troughs of stone for the use of camels and flocks; such as were doubtless used of old for the flocks and herds which then fed on the adjacent hills. Ascending the higher ground N. of the wells, we found these low hills strewed with the ruins of former habitations,

the foundations of which are distinctly to be traced. These ruins extend over a space half a mile long by a quarter of a mile broad. Here then is the spot where Abraham and Isaac and Jacob often lived! Here Samuel made his sons judges; and from hence Elijah wandered out into the southern Desert, and sat down under the Rethem, or shrub of broom, just as our Arabs sat down under it every day and every night! Over these swelling hills the flocks of the patriarchs roved by thousands;—we now found only a few camels, asses, and goats.

From Bír Seba' to Hebron we travelled $12\frac{1}{2}$ hours, here equivalent to about 30 miles. The general course was N.E. by E. After $1\frac{1}{2}$ hour we came out upon a wide open plain, covered with grass, but now parched with drought. Fields of wheat and barley were seen all around; and before us were hills, the beginning of the mountains of Judah. At Dhoheriyeh, the first Syrian village, the hills around were covered with mingled flocks of sheep and goats, and herds of neat cattle, horses, asses, and camels, in the true patriarchal style of ancient days. At this place our good Towará left us: we took other camels and proceeded to Hebron. Here the pool over which David hung up the assassins of Ishbosheth still remains, and fixes the site of the ancient city. The cave of Macphelah cannot well have been within the city; and therefore the present mosque cannot cover its site. We could not but notice the fertility of the neighbouring valleys, full of corn-fields and vineyards yielding the largest and finest clusters of all Palestine; and likewise the rich pasturage of the hills, over which were scattered numerous flocks and herds. Yet to a careless observer the country can only appear steril and forbidding; for the limestone rocks everywhere come out upon the surface, and are strewn over it to such a degree, that a more stony or rocky region is very rarely to be seen.

We took the direct road to Jerusalem. It is laid with stones in many places, and is doubtless the ancient road, which patriarchs and kings of old have often trod; but it is only a path for beasts; no wheels have ever passed there. The distance to Jerusalem is about 21 miles, on a course between N.N.E. and N.E. by N. We hurried onward, and reached the Holy City at sunset, April 14th, just before the closing of the gates on the evening before Easter Sunday.

II. JERUSALEM. Our journey to Palestine was now completed; and our researches and travels in Palestine were to begin. In respect to these we adopted for our future guidance the two following principles, viz., 1. To direct our researches chiefly to those parts of the country which former travellers had never visited; and, 2. To obtain information, as far as possible, not from the legends of monks and other foreigners, but directly from the

native Arabs of the land. We remained at first more than three weeks in Jerusalem; and afterwards made that city the central point from which to set off on excursions to different parts of the country. In the mean time we diligently explored every part of the city, and even here saw or heard of several things which to us at least were new.

On entering Jerusalem I was prepared, from the descriptions of many travellers, to find the houses miserable, the streets filthy, and the population squalid; but in all these respects I was agreeably disappointed. The houses are better built, and the streets cleaner, than those of Alexandria, Smyrna, or Constantinople. The hills and valleys which marked the different quarters of the ancient city are still distinctly visible. The valley of the Tyropœum may be traced from its head near the Yaffâ gate to its foot at the pool of Siloam. The hills of Zion, Akra, Bezetha, and Moriah, are yet distinct and marked. The latter, on which stood the ancient Temple, is now occupied by the mosque of 'Omar and the extensive court or area around it.

One of the earliest objects of our attention was naturally this area, in reference to its antiquity and connexion with the ancient Temple. It is an elevated plateau or terrace, nearly in the form of a parallelogram, supported by and within massive walls built up from the valleys or lower ground on all sides. The southern wall is about 60 feet high. The upper part of these external walls is obviously of modern origin; but it is not less easy to perceive that the lower portions, for the most part, are of an earlier date. These are composed generally of very large stones, many of them 20 feet or more in length by 5 or 6 feet thick, hewn in a peculiar manner. At the first view of these walls, I felt persuaded that these lower portions had belonged to the ancient Temple, and were to be referred back at least to the time of Herod, if not to the days of Nehemiah or Solomon. This conviction was afterwards strengthened by our discovering, near the S.W. corner in the western wall, the remains, or rather the foot, of an immense arch, springing out from the wall in the direction towards Mount Zion, across the valley of the Tyropœum. The traces of this arch are too distinct and definite to be mistaken; and it can only have belonged to the bridge which, according to Josephus, led from this part of the Temple-area to the Xystus on Zion; thus proving incontestably the antiquity of that portion of the wall from which it springs.

We then examined the remarkable tower in the citadel near the Yaffâ gate, which, even to the unpractised eye, bears strong marks of antiquity. Some former travellers have already regarded this as the Hippicus of Herod; and we found every reason to assent to this conclusion. So far as we could discover, the lower

part of the tower is wholly solid, as described by Josephus; at least there is no known or visible entrance to it, either from above or below.

The present walls of the modern city were built about 300 years ago, as appears from numerous Arabic inscriptions. Remains of the former wall, which probably existed in the time of the crusades, are still visible on the outside, N.W. of the Yaffá gate; also on the N. side of the city, and in the interior of the N.W. corner. Of the *ancient* wall around Mount Zion, traces may yet be seen for some distance in the scarped rocks below the S.W. brow of Zion. On the high ground N. of the N.W. corner of the city we discovered evident traces of what must have been the *third* or exterior wall described by Josephus in this quarter, erected after the time of Christ. Here must have stood the tower Psephinos; and from this point we were able to trace the foundation of the same ancient wall for a considerable distance further in a N.E. direction.

Of the *second* wall of Josephus, which at the time of the Crucifixion was the exterior wall of the city on this side, we could find no remaining traces, unless it be two square ancient towers which we discovered connected with the wall inside of the Damascus gate, one on each side of the gate. These towers are built of large stones precisely like those mentioned above as belonging to the ancient Temple walls. They have been much injured in building the modern wall of the city, but are evidently ancient, and apparently older than Hippicus; they were, most probably, the guard-houses of an ancient gate upon this spot; and this could well only have belonged to the said second wall. If this hypothesis be correct, it will go far to decide the question as to the site of the church of the Holy Sepulchre, which must then have fallen within this wall, and so within the ancient city. Indeed, the church stands upon the very ridge of the hill Akra, which, according to Josephus, and to every probability, must have formed part of the lower city, and been enclosed within the second wall.

Another object of our attention was the supply of water in and around the city. At the present day Jerusalem is supplied almost wholly by rain-water, preserved in cisterns cut in the rock on which the houses stand. Almost every house has one or more cisterns; that in which we resided had no less than four very large ones. The ancient city was probably supplied in the same manner. Indeed, with a little attention, there can never be any want of water within the walls. The aqueduct which comes from Solomon's pools beyond Bethlehem brings water only to the mosque of Omar. Outside of the city, besides the ancient reservoirs, there are wells in various places, some with water and some

without. The brook Kidron, in the valley of Jehosaphat, flows only when the rain-water descends into it from the adjacent hills. Fountains of running water exist only in this valley; and of these there are three, viz.:—1. the fountain of the Virgin, or of Siloam, just south of the site of the Temple; 2. the pool of Siloam, just within the entrance of the Tyropœum; 3. the well of Nehemiah, or of Job, opposite the entrance of the valley of Hinnom. This last is a deep well of living water, which in the rainy season overflows: it is, beyond doubt, the *En Rogel* of Scripture. The pool of Siloam is wholly artificial, and receives its waters from the fountain of the Virgin, through a subterraneous channel cut through the solid rock. We crawled through this channel and measured it. The fountain of the Virgin is also evidently an artificial excavation in the rock; but whence the water is derived is a mystery. It has a sweetish, slightly brackish taste; and flows irregularly, or only at irregular intervals. We were witnesses of this irregular flow; and were told by the women who came for water that sometimes, during summer, it ceases to flow for several weeks; when, on a sudden, the water comes gushing out again in abundance.

Ancient writers have spoken of a fountain of living water as existing under the Temple; though their assertions have, in general, obtained little credit. Soon after our arrival in Jerusalem, we were told of a similar fountain under the mosque of 'Omar, the waters of which were used to supply a bath in the vicinity of the mosque. We went to the bath, and found two men drawing water from a deep well. They told us that the water flows into the well from a passage cut in the rock, and leading under the mosque, where is a chamber and a living fountain. In summer, when the water is so low as not to flow out into the well, they go down and bring it out by hand. The taste of the water is precisely like that of the fountain of the Virgin in the valley below. We made all our preparations to descend into the well and examine the fountain, but were hindered at the time, and were unable afterwards to resume the investigation. Is, perhaps, the water of this fountain brought down by a subterraneous channel from some higher point? Is there a connexion between this fountain under the mosque and that in the valley below; and is the irregular flow of the latter in some way dependent on this circumstance? These questions may, not improbably, at some future time, be answered in the affirmative.

When we arrived at Jerusalem war was raging in the north between the Druses and the forces of the Páshá; and, as if we were to have a specimen of all the evils of the Oriental world, in a few days after our arrival the plague broke out; at first doubtfully, then decidedly, though mildly. Other travellers left the

city immediately; and some who were on their way thither turned back. We continued our investigations without interruption; and a kind Providence preserved us from the danger.

III. FROM Jerusalem to Gaza, Hebron, and Wádí Músá.

On returning to Jerusalem, from an excursion of eight days to Engeddi and the Dead Sea, we found the plague slowly but constantly increasing; and it was rumoured that the city was soon to be shut up. We therefore remained but a single day, in order to make preparations for our longer journey to Wádí Músá. We set off, May 17th, on horses and mules; and, on May 19th, the city was shut up, and none suffered to go out, without first performing a quarantine of seven days. Our excursion occupied in all 23 days.

We made at first a slight detour, in order to pass by Beït Jala, a Christian village, half an hour N.W. of Bethlehem; and then continued S.W. across the mountains to the direct ancient road from Jerusalem to Eleutheropolis and Gaza, through a region as yet unvisited by modern travellers. At a distance on our right was the deep valley of Turpentine (so called by monks and travellers), or, as the Arabs name it in this part, Wádí Surár, which runs in a S.W. direction, until it opens out into the great plain between the mountains and the Mediterranean. On our left was another similar valley, Wádí Sunnet. The region is full of ruined sites and ruined villages, some deserted and some partially inhabited; among which are still found several ancient names. On our right, beyond Wádí Surár, we could see the hill and ruined village Sohá, which it has pleased the monks to assume as the ancient Modin, the burial-place of the Maccabees, against the express testimony of Eusebius and Jerome. We came at night to Beït Netíf, a large village on a high part of the ridge between the two valleys above mentioned.

The next day was devoted to a visit to Beït Jibrín, the ancient Betogabris of Greek and Roman writers, of which and its fortress we had heard much from the Arabs; and to a search for the site of ancient Eleutheropolis. From the elevated spot where we lodged, the sheikh of the village pointed out to us several places still bearing, in Arabic, names corresponding to their ancient Hebrew appellations, and celebrated in Scripture as the scenes of Samson's exploits and history: such were Zorah, Timnath, Sokho, and others. Four places were also pointed out, respecting which Eusebius and Jerome have specified their distances from Eleutheropolis, viz., Zorah and Bethshemesh, towards Nicopolis; and Jarmah and Sokho, on the way to Jerusalem. Following out the specified distances along the ancient road, we came directly upon Beït Jibrín, which lies among hills between the mountains and

the plain. Here are the remains of a large Roman fortress of immense strength, which was built up again in the time of the crusades: around it are the traces of an extensive city.

We had received the impression that we must look for Eleutheropolis further west upon the plain; and accordingly turned our course that way to Şafiyeh, a conspicuous village, lying on an isolated hill. Here, however, we could find no trace of any ancient site. We then proceeded to Gaza; whence, after two days, we returned by a different route, searching diligently for the sites of ancient Lachish, Gath, and other cities, but finding none except Eglon, on a mound strewed with stones, still called 'Ajlán. Again arrived at Beit Jibrin, we visited several very singular artificial caverns in the vicinity. Eusebius and Jerome mention also Jedna and Nazib as being distant from Eleutheropolis, one 6 and the other 7 miles, on the way to Hebron. These names still exist; and, taking the Hebron route, we found Jedna to be just 6 miles from Beit Jibrin. Nazib lies yet a little further on another parallel road. This circumstance seems to decide the identity of Beit Jibrin with Eleutheropolis. The former was the ancient name; the latter was imposed by the Romans, and has been since forgotten, as in so many other instances. It is also remarkable that those ancient writers who speak of Eleutheropolis do not mention Betogabris; while those who speak of the latter are silent as to the former. Rejoicing in this result, we pursued our way to Hebron; and, after a steep and toilsome ascent on a ridge between two deep valleys, we rested for a time at Taffith, the Beth Tappuah of Judah; and arrived at Hebron in about 6 hours from Beit Jibrin. Here, dismissing our mule-teers, we engaged camels for Wádí Músá from the sheikh of the Jehálin, a Bedawí tribe inhabiting the territory S.E. of Hebron.

We had long before formed the plan to proceed to Wádí Músá by way of the south end of the Dead Sea, and so southwards along Wádí 'Arabah, in the hope of being able to solve the pending question, whether the Jordan could ever have flowed through this valley to the Gulf of 'Aḳabah. Here, too, we had hoped again to have been the first; but were anticipated by the Count de Bertou, who preceded us by three or four weeks, and whom we had seen at Jerusalem after his return. After being detained two days at Hebron, we set off, May 24th; and, passing in sight of ancient Ziph on the left, and Yutta (ancient Jutta) on the right, and near the ruins of Carmel and Maon, we continued across an undulating desert in a S.E. direction, and came, towards the close of the second day's journey, to the brow of the steep descent leading down to the Dead Sea. This descent is in all not less than 1500 feet; but here, and far to the south, it is divided into two parts or offsets of nearly equal height: between these

lies a terrace or plain nearly three hours broad, the surface of which is covered with low ridges and conical hills of soft chalky limestone, verging into marl. At the foot of the second descent is a small deserted Turkish fort, in the narrow Wádí Zuweireh (not Zoar), which leads out to the sea in about half an hour. We reached the shore not far from the northern end of Usdúm, a low, long mountain ridge, running here from N.N.W. to S.S.E., and giving the same direction to the shore of the sea. This ridge, Usdúm, is, in general, not far from 150 feet high, and continues to run in this direction for two hours to the southern extremity of the sea, where it trends to the S.S.W. for an hour more, and then terminates. The striking peculiarity of this mountain is, that the whole body of it is *a mass of solid rock-salt*; covered over, indeed, with layers of soft limestone and marl, or the like, through which the salt often breaks out, and appears on the sides in precipices, 40 to 50 feet high, and several hundred feet long. Often also it is broken off in large and small pieces, which are strewn like stones along the shore, or fallen down as débris.

The south end of the sea is very shallow, and the shore continues quite flat for some distance further south; so that there are traces of its being overflowed by the sea for two or three miles south of the water-line, as we saw it. The western side of this southern valley, or Ghor, is wholly naked of vegetation; but on the eastern side, where streams come down from the eastern mountains, there is a luxuriant vegetation and some tillage. We continued on the western side, along the base of Usdúm, crossing several purling rills of transparent water, flowing from the mountain towards the sea, but salt as the saltiest brine. Before us, as we advanced southwards, appeared a line of cliffs, 50 to 150 feet high, stretching across the whole broad valley, and apparently barring all further progress. These cliffs are mentioned by Irby and Mangles, who supposed them to be sand-hills. We approached their western end in $2\frac{1}{2}$ hours from the south end of the sea. They proved to be of marl, and run off from this point in a general course S.S.E. across the valley. All along their base are fountains of brackish water oozing out, and forming a tract of marshy land towards the north. Our route now lay along the base of these cliffs; and, after resting for a time at a fine gushing fountain, we came, in two hours, to the mouth of Wádí Jíb, a deep valley coming down from the south through the cliffs, and showing the latter to be only an offset between the lower plain which we had just crossed, and the higher level of the same great valley further south. The name El Ghór is applied to the valley between the Dead Sea and this offset; further south the whole of the broad valley is called El 'Arabah, quite to 'Aḳabah. These apparent cliffs are not improbably the 'Aḳrabbim of Scripture. The Wádí Jíb begins far to the south of Mount Hor, beyond

Wádí Gharandel, and flows down in a winding course through the midst of El 'Arabah, draining off all its waters northward to the Dead Sea. Where we entered Wádí Jíb, at its northern side, it is half a mile broad, with precipitous banks of chalky earth or marl, 100 to 150 feet high; and exhibiting traces of an immense volume of water in the rainy season, flowing northwards. It may be recollected that the waters of Wádí Jeráfeh, in the western desert, which drains the S.E. part of that desert, far to the southward of 'Aḳabah, also flow northwards into El 'Arabah, and so, of course, through Wádí Jíb. Hence, instead of the Jordan flowing southwards to the Gulf of 'Aḳabah, we find the waters of the desert further south than Aḳabah flowing northwards into the Dead Sea. The nature of the country shows, without measurement, that the surface of the Dead Sea must be lower than that of the Red Sea or the Mediterranean.

We continued our course up the Wádí Jíb southwards for several hours, its banks becoming gradually lower, and at length permitting us to emerge from it. We were now not far from the eastern mountains, nearly opposite the broad Wádí Ghuweir, while before us was Mount Hor, rising like a cone irregularly truncated. We turned into these mountains at some distance north of Mount Hor, in order to approach Wádí Músá from the east, through its celebrated ancient entrance. A long and steep ascent—the pass of Nemellah—brought us out upon the plateaus of the porphyry formation; above which are still the hills of sandstone among which Petra was situated. The entrance to this ancient city, through the long chasm or cleft in the sandstone rock, is truly magnificent; and not less splendid and surprisingly beautiful is the view of the Khazínah, or temple hewn in the opposite rock, as the traveller emerges from the western extremity of the passage. Then follow long ranges of tombs hewn in the rocky sides of the valley, with ornamental façades, in a style of striking though florid architecture. What we sought in Wádí Músá was more the general impression of the whole; since the details have been correctly given by the pencil of Laborde. We examined particularly whether any of these excavations were perhaps intended as dwellings for the living; but could see no marks of such design—nothing but habitations of the dead, or temples for the gods. There was, indeed, no need of their being thus used; for the numerous foundations of dwellings show that a large city of houses built of stone once stood in the valley.

We had nearly completed our observations, and were preparing soon to set off on our return by way of Mount Hor, when the old sheikh of Wádí Músá, Abú Zeitún, who caused so much difficulty to Mr. Banks and his companions in 1817, came down upon us with thirty armed men, demanding a tribute of a thousand piastres for the privilege of visiting his territory. We declined

payment of course; but, after long and repeated altercation, it came to this result, that, unless we paid this full sum, he would not suffer us to visit Mount Hor. We attempted, nevertheless, to set off in this direction, our own sheikh leading the forward camel; but the hostile party closed around, and swords were drawn and brandished; which, however, among these Arabs, means nothing more than to make a flourish. As it was in vain for us to use force against so large a party, we decided to set off on our return by the way we came. This took the old man by surprise, and thwarted his plans. Messengers soon followed us, saying we might return for the half; and, at last, for nothing. We replied, that he had driven us from Wádí Músá, and we should not return, but should report his conduct at Cairo. The old man then came himself, to get our good-will, as he said, which was worth more to him than money. We thought it better to keep on our way; and suffered no further interruption. It was probably the fear of the Páshá of Egypt alone that withheld these miscreants from plundering us outright; and we afterwards received compliments from the Arabs in and around Hebron for the boldness and address with which we had extricated ourselves from the old sheikh's power.

Descending the pass of Nemellah, we struck across El-'Arabah in a W.N.W. direction, travelling the greater part of the night. In the morning we reached Wádí Jíb, here quite on the western side of El-'Arabah, and stopped for a time at the fountain El Weibi. Other fountains occur at intervals along the valley at the foot of the western hills, both north and south of El Weíbí. From here a path strikes up the western mountain in the direction of Hebron, which is used by the southern Arabs. Our guides took a more northern road, leading up a very steep pass called Sufáh, over a broad surface of shelving rock extending nearly from the bottom to the top, an elevation of 1000 or 1200 feet. This is probably the hill Zephath, afterwards Hormah, where the Israelites attempted to enter Palestine, but were driven back, and were also attacked by the king of Arad; Num. xiv. 40, seq., xxi. 1, seq., Judges i. 17. Some miles N.N.W. of this pass is a conical hill still bearing the name of Tel Arad, probably the site of the ancient town. All these circumstances lead me to place the site of Kadesh in the great valley below, near the fountain El Weíbí or one of the neighbouring springs. Here it would be near the border of Edom, opposite to a broad passage leading up through the eastern mountains, and in full sight of Mount Hor. That the Israelites must have approached Palestine through the Wádí 'Arabah, is a necessary conclusion from the mountainous character of the district on the west of this valley, through which no road has ever passed. But no trace of the name Kadesh is to be found, neither in the valley below nor on the table land above.

Our further way to Hebron led us by the sites of 'Ararah, the Aroer of Judah; and Melh, where is a fine well and the traces of a town, not improbably the ancient Moladah or Malatha. Nearer to Hebron we passed Semú'ah, perhaps the Hebrew Sema; and Yuttah, the ancient Sutta, the probable birthplace of John the Baptist, and still a town of some importance. At Hebron we remained a day and a half, being obliged to send for horses to Jerusalem.

We left Hebron again on the 6th of June, taking now a S.W. course by the large village Dúrah, the Adora of Josephus; and descending the mountain to El Burj, a ruined castle of which we had heard much, but where we found nothing of antiquity. Hence we bent our course northward among the hills; and passing again through Jedna, rested for a time at Terkumieh, the Tricomias of former ages, leaving Beît Jibrín on our left. We lodged a second time at Beit Neítif; and the next morning descending N.N.W., we came to the site of the ancient Bethshemesh in the opening of Wádí Surár into the plain. Here are evident traces of a large city. From this point we turned our course N.W. into the plain, in search of the ancient and long-lost Ekron. After travelling in this direction for four hours, we came to the large village 'Akír, an Arabic name corresponding to the Hebrew Ekron. The situation corresponds also to the accounts of Eusebius and Jerome. Nothing of antiquity remains; perhaps because the ancient houses, like the modern hovels, were built, not of stone, but of earth.

From Ekron to Ramleh is two hours: here we lodged; and the next day proceeded to Jerusalem by the camel-road, which also is the ancient Jewish and Roman way, over Ludd (Lydda), Gimzo, Lower and Upper Bethhoron (now Beît-U'r), and Jib or Gibeon. The pass between the two villages of Bethhoron is a steep and rugged ascent of some 1500 feet, up the point of a ridge between deep valleys. It is the ancient road which the Roman armies ascended, and has in several places steps cut in the rock. The present shorter and less practicable route between Ramleh and Jerusalem appears not to have been in use in the time of the Romans. Looking down from Upper Bethhoron, a broad valley is seen in the S.W. issuing from the mountains and hills into the plain; while on the ridge that skirts its S.W. side, is seen a village called Yálon, the Arabic form for the Hebrew Ajalon. Here then is probably the spot where Joshua in pursuit of the five kings, having arrived at Upper Bethhoron, looked back toward Gibeon, and down upon the valley before him, and uttered the command: "Sun, stand thou still on Gibeon; and thou, Moon, in the valley of Ajalon!"

We found Jerusalem still shut up on account of the plague

and therefore pitched our tent in the olive-grove north of the city, before the Damascus gate. * * * *

In other excursions from Jerusalem, and on our subsequent journey northward to Beirût, we visited the villages and sites of Anothoth, Gibeah, Micmash, and Bethel, all N.E. and N. of the Holy City, and still bearing in Arabic the names Anátah, Jeba', Mùkhmás, and Beit-ín. The extensive ruins of the latter place, Bethel, lie 45 minutes N.E. of Bîreh, just on the right of the Nablús road. Farther north we turned aside to Jifnah, the Gophna of Josephus; and also to Seilúm, the site of ancient Shiloh, which Josephus also writes Silun. (Σιλοὺν.) Along the western shore of the Lake of Tiberias, we made minute and persevering inquiries after the ancient names Capernaum, Bethsaida, and Chorazin; but no trace of them remains among the Arab population. If former travellers have heard these names, it must have been from the monks of Nazareth or their dependents.

On the way from Safet to Tyre, nearly two hours N.W. of Safet, we passed near the crater of an extinct volcano; which was probably the central-point of the great earthquake of Jan. 1st, 1837, by which Safet and the adjacent villages were destroyed.

Extract from a Letter of Professor BERGHAUS.

Potsdam, April 30, 1839.

SIR,—In accordance with former communications from Professor E. Robinson, of New York, he will transmit to you this day one of the maps, which are the fruits of the travels of himself and his companion, the Rev. E. Smith, in Arabia Petræa, and the Holy Land. I cannot permit the opportunity to pass by without accompanying this sketch with a few words.

In the course of my life I have had in my hands many documents in reference to geographical, and especially cartographical objects, and from them have acquired the conviction that, among all oriental travellers since the time of Niebuhr, the prize is due to the late lamented Burckhardt, so far as it respects minute attention, even to things apparently indifferent, and also accuracy in the measurement of bearings and angles, and in the specification of time for the determination of distances. This conviction I have expressed publicly and unreservedly, perhaps, in other words, in the Memoirs accompanying my maps of Asia.

This view, however, I must now essentially modify, after having carefully examined the Journals of Messrs. Robinson and Smith during their travels in the peninsula of Mount Sinai, through the great desert Et-Tih, and in Palestine. The observations of these two travellers are so full and comprehensive, their notes

upon the form and the features of the country so exact and definite, that the geographer is in a situation, on the basis of these specifications, to construct a special map of the territory, which may perhaps leave little more to be desired.

In support of these views, I may refer to the accompanying sketch-map of the route of the travellers from 'Akabah through the desert Et-Tih to Hebron, which I have constructed, and which we, Professor Robinson and myself, would commend to the favourable notice of the Royal Geographical Society.

Professor Robinson has placed his journals at my disposal, and, on my recommendation, has prepared from them an abstract in a tabular form, particularly adapted to serve as a foundation for the construction of the route-maps.

You will be able to appreciate the impatience with which I entered upon the construction of these maps, if you will have the goodness to call to mind that I published a few years ago a map of Syria, which was so fortunate as to meet the approbation of your Society. [*Journal*, vol. vii. p. 183.] My attention was more especially drawn to the tour from 'Akabah to Hebron, because the travellers have here passed through a real *terra incognita*, which is now for the first time represented on a map. The original sketch of this route is three times larger than the copy herewith forwarded to you. I would also mention that several points, the position of which was determined by Messrs. Robinson and Smith, are not inserted, because they fall without the margin of the copy. These points are Jebel Ikhrim, Jebel Yelek, and Jebel el-Helâl, all lying westward of the route, and adapted to determine the course of the Wádî el-'Aráish, and its distance from the line of travel.

In my map of Syria I have assumed Hebron to be in long. $35^{\circ} 12' 25''$ E. from Greenwich, according to the Azimuth of Jerusalem, supplied by Seetzen's very rough map. (*Syrian Memoir*, p. 34.) But I find this Azimuth to be erroneous, since the itinerary of Messrs. Robinson and Smith gives the long. of Hebron at $34^{\circ} 57' 13''$ E., a difference of more than a quarter of a degree. Yet I would remark, that even this position can only be regarded as a *first approximation* to the true longitude of Hebron, inasmuch as the subsequent routes of the travellers afford the means of corroborating the determination from both Jerusalem and Ramleh, and, above all, from Gaza, which lies nearly on the same parallel with Hebron, or El-Khulil.

The most inaccurate part of my map of Syria is the topographical delineation of Judea, because no traveller within my reach had then examined this portion of the Holy Land with the same attention which Burckhardt had bestowed on the country E. of the Jordan, and around Mount Lebanon. It is therefore eminently

creditable on the part of Messrs. Robinson and Smith, in respect to Biblical geography, that they have visited and investigated the territory of Judea in all directions—this land of the earliest of all history for the nations of Christian civilization. In this way they have become real discoverers in the field of topography and history.

Their examination extends over the whole country between the shores of the Mediterranean and the Dead Sea, from the parallel of about Nablús to the south end of the Asphaltic Lake, and from these points, on the one hand southwards as far as to Wádí Músa, and on the other northwards as far as to Safed, Saide, and Beirút.

On the Mount of Olives, Professor Robinson determined the length of a base of 1425·72 yards, by means of which, and the application of their very numerous bearings, I have been able to construct and calculate a net of triangles, extending N. to Taiyíbeh, E. to the Dead Sea, S. (as yet) as far as to the Frank Mountain, and which we may probably be able to carry on as far as to the region of Ramleh and Gaza, and perhaps also to Hebron, Carmel, and 'Ain Jiddi. I find the distance between the Mount of Olives and the N.W. corner of the Dead Sea to be 29093·5 yards, or 14·34 geographical miles. At 'Ain Jiddi they measured a second base, in order to determine the breadth of the Dead Sea. This I find to be 15953·1 yards, or 7·86 geographical miles.

I have already constructed a portion of the itineraries in Judea, on a scale three times, and in some parts six times, larger than that of the accompanying sketch map. This was necessary, in order to exhibit in full all the details.

I am of opinion that it would be a great loss for geography, were the materials collected by Messrs. Robinson and Smith not to be used for the construction of a map on a large scale. Their journey, undertaken solely for the interests of Biblical geography, would be deprived of its finest fruits, and the many hardships they must have endured will have been in a measure superfluous, should the results of their measurements and observations be published only in the form of a journal; for this can never produce the lively impression that is felt in looking at a good and accurate map, and this great desideratum I hope shortly to take in hand.

In conclusion, I would remark, as to the accompanying route-map from 'Akabah to Hebron, that the direction of the Wádís between Birsheba and Hebron may perhaps require some slight correction, when all the itineraries of the travellers shall have been fully constructed.

I have the honour to be, &c.

HEINRICH BERGHAUS,

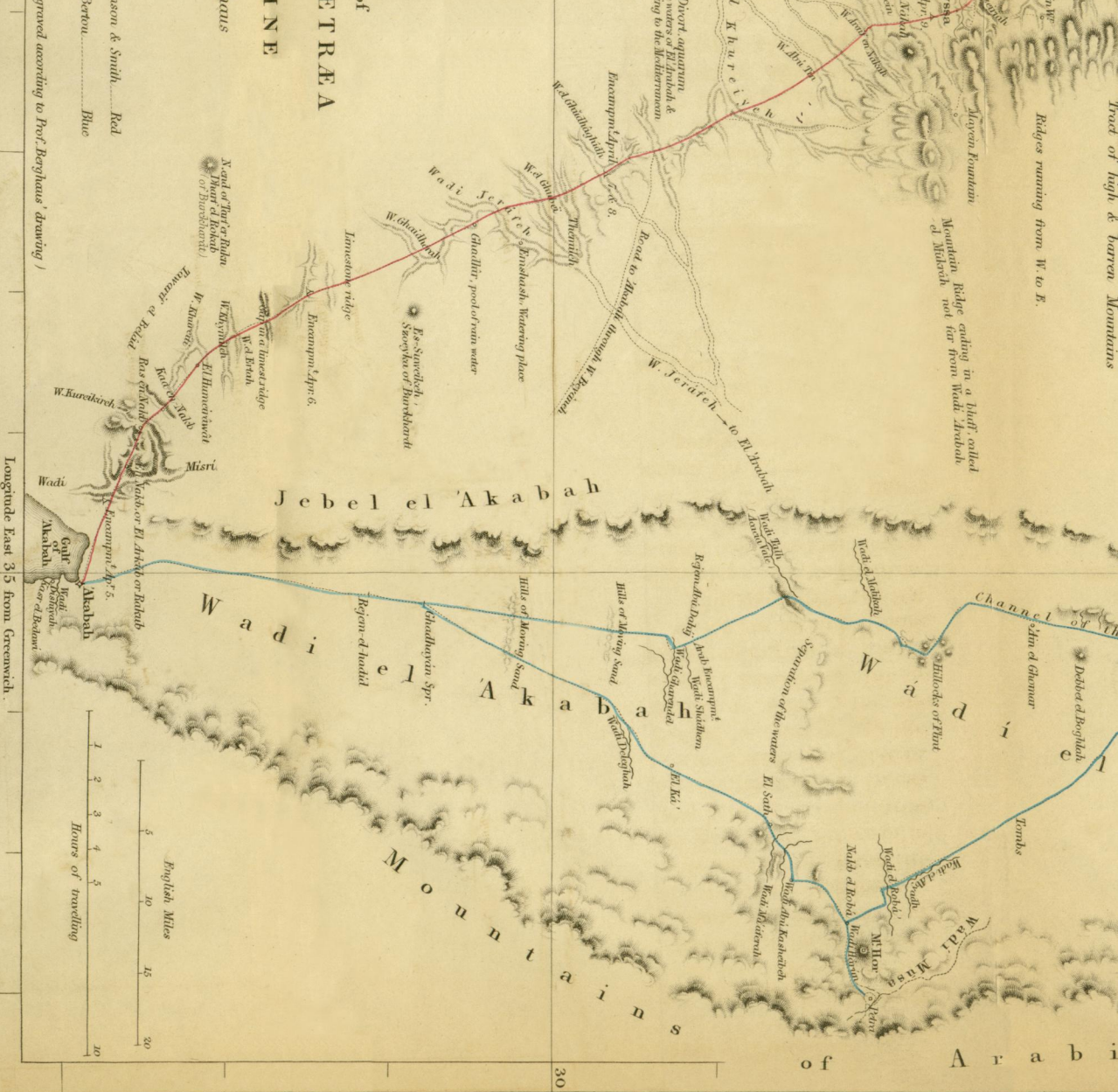
For. Hon. Mem. R. G. S. of London.

To Captain Washington, R.N., Secretary.

Heinrich Berghaus
1839.

D^o of Count de Bertou.....Blue

(The head of the Gulf of 'Akabab is engraved according to Prof. Berghaus' drawing.)



PLAN OF SUR

3:5

PERTSALEM

Kods or Bost el Makles

East of Sheikh

Mir Jiyas (S'Plas)

El Ilhod + Kclat el Bannk

Port el Ralibhat

Sheikh Karmudan (Spring)

Beit Annun

El Khmij or Hitham

Zif (well)

Karmud (r's)

Sem'ich

El Khmij

El Khmij

El Khmij

El Khmij

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DEAD SEA

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